

Amendments to the Claims

The following Listing of Claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1 – 10 (withdrawn)

11. (currently amended) A device for removing proteases from biological fluids and pharmaceutical solutions comprising a housing having a fluid inlet and a fluid outlet, said housing containing a plurality of ~~membrane bodies~~ membranes arranged therein in series, wherein said ~~membrane bodies~~ membranes each consist essentially of a functionalized microporous membrane body containing functional groups capable of chemically coupling with protease inhibitors and at least one protease inhibitor capable of selectively binding ~~with~~ proteases, wherein said at least one protease inhibitor is coupled by a nonionic chemical bond to said membrane body via said functional groups a protease selected from the group consisting of an acidic protease, a metalloprotease, a cysteine protease and a serine protease, said serine protease inhibitor being selected from the group consisting of TLCK and p-aminobenzamidine.

12. (cancelled)

13. (currently amended) The device of claim ~~12~~ 11 wherein said protease inhibitor capable of binding with an acidic protease is pepstatin; said protease inhibitor capable of binding with a metalloprotease is selected from the group consisting of bestatin, diprotin and EDTA; and said protease inhibitor capable of binding with a cysteine protease is selected from the group consisting of antipain, chymostatin, leupeptin and E64; ~~and said protease inhibitor capable of binding with a serine protease is selected from the group consisting of TLCK and p-aminobenzamidine.~~

14. (currently amended) The device of claim 11 wherein said ~~membrane bodies~~ membranes each contain two different protease inhibitors.

15. (currently amended) A method for removing proteases from fluids comprising feeding a protease-containing fluid to the device of any of claims ~~11-14~~ 11, 13, 14 or 16.

16. (newly presented) The device of claim 11 wherein said protease inhibitor capable of binding with a serine protease is selected from the group consisting of TLCK and p-aminobenzamidine and said functional groups are epoxy groups.